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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,694	02/25/2004	John M. Harris	CE09312R	3687
22917	7590	12/28/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			ZEWARI, SAYED T	
			ART UNIT	PAPER NUMBER
			2687	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/786,694	<b>Applicant(s)</b> HARRIS, JOHN M.	
	<b>Examiner</b> Sayed T. Zewari	<b>Art Unit</b> 2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/18/04, 6/24/04</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Objections***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "A Mobile Communication Station With Three States Of Active, Dormant, And Semi-Dormant Having The Capability Adjusting Inactivity Time Based On Mobility Indicators".

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 27 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Haartsen et al. (US 6,804,542).

With respect to claim 27, Haartsen discloses a method for use with a wireless mobile station that is adapted and configured to interact with a wireless communication system using at least a first, second, and third mode of operation (See Haartsen col.8

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lines 45-56, figure 6 & 7, col.3 lines 14-22, 47-51, col.4 lines 11-43, 53-61, col.5 lines 1-10, col.6 lines 17-26 and 55-57). Haartsen further discloses that first mode of operation comprises an active mode of operation (See Haartsen col.8 lines 45-56, figure 6 & 7, also active mode of operation is inherent in operation of any mobile communication. No mobile communication device operate solely in dormant mode), the third mode of operation comprises a dormant mode of operation (See Haartsen col.3 lines 14-22, col.6 lines 17-26, 55-57, col.7 lines 18-29, figure 1, col.8 lines 20-28, 40-44, 45-56, and figure 6 & 7 where Haartsen discusses a dormant mode with largest idle time), and the second mode of operation comprises a semi-dormant mode of operation (See Haartsen col.3 lines 47-51, col.4 lines 11-43, lines 53-61, col.5 lines 1-10, col.8 lines 45-56, and figure 6 & 7, where Haartsen discusses a dormant mode with less idle time than the largest). Haartsen further discloses monitoring at least one indicator of communication resources setup delay information as corresponds to the wireless communication system to provide a setup delay indicia (See Haartsen figure 6 & 7, col.8 lines 20-28, 45-56 where the indicia measured is the idle time and where Haartsen discusses monitoring channel activity). Using the setup delay indicial to adjust an inactivity temporal window as corresponds to the wireless mobile station during a mode of operation (See Haartsen figure 6 & 7, col.8 lines 20-28, 45-56 where the indicia measured is the idle time and where Haartsen discusses monitoring channel activity).

With respect to claim 28, Haartsen discloses all the limitations of claim 27.

Haartsen further discloses

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 26, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US 6,804,542 B1) in view of Suzuki et al (US 5,301,225).

With respect to claim 1, Haartsen discloses a method for use with a wireless mobile station that is adapted and configured to interact with a wireless communication system using at least a first, second, and third mode of operation (See Haartsen col.8 lines 45-56, figure 6 & 7, col.3 lines 14-22, 47-51, col.4 lines 11-43, 53-61, col.5 lines 1-10, col.6 lines 17-26 and 55-57). Haartsen further discloses that first mode of operation comprises an active mode of operation (See Haartsen col.8 lines 45-56, figure 6 & 7, Haartsen discloses a mobile wireless communication, thereby an active mode), the third mode of operation comprises a dormant mode of operation (See Haartsen col.3 lines 14-22, col.6 lines 17-26, 55-57, col.7 lines 18-29, figure 1, col.8 lines 20-28, 40-44, 45-56, and figure 6 & 7 where Haartsen discusses a dormant mode with largest idle time), and the second mode of operation comprises a semi-dormant mode of operation (See Haartsen col.3 lines 47-51, col.4 lines 11-43, lines 53-61, col.5 lines 1-10, col.8 lines 45-56, and figure 6 & 7, where Haartsen discusses a dormant mode with less idle time than the largest). Haartsen further discloses monitoring at least one indicator regarding the

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wireless mobile station to provide an indicia; using the mobility indicia to adjust an inactivity temporal window during at least one of the modes of operation (See Haartsen figure 6 & 7, col.8 lines 20-28, 45-56 where the indicia measured is the idle time and where Haartsen monitoring channel activity). However, Haartsen does not specifically disclose an indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia. But Suzuki discloses an indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia (See Suzuki col.6 lines 34-37, 49-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention disclosed by Haartsen and provide an indicator of relative mobility providing a mobility indicia, thereby reducing power consumption and occupying network resources, as discussed by Suzuki (See Suzuki col.2 lines 25-29).

With respect to claim 20, Haartsen discloses an apparatus with inherent first memory having indicia information as pertains to at least a first wireless mobile station stored therein (See Haartsen figure 7, where the flow chart indicates the inherent presence of a control unit which runs the software. This software needs a storage place, a memory). Haartsen further discloses an inherent second memory having information corresponding to an inactivity timer as pertains to the first wireless mobile station stored therein (See Haartsen figure 2-8, col.3 lines 14-22, 47-51, col.4 lines 11-43, 53-61, col.5 lines 1-10, col. 6 lines 17-26, 55-57, where second memory can be another segment of the first memory. Furthermore the second memories include EEPROM, ROM, or Flash memory which are inherent part of a control unit). Haartsen further discloses a

processing platform that is operably coupled to the first and second memory and having instructions stored therein to modify operation of the inactivity timer as a function of at least the indicia information (See Haartsen figure 7, where the flow chart indicates the inherent presence of a control unit which runs the software. This control unit inherently needs to be coupled to memory in order to function). However Haartsen does not specifically disclose a mobility indicia information. But Suzuki discloses a mobility indicia (See Suzuki col.3, lines 3-30, col.6 lines 15-24, 34-37, 49-55, figure 2 and 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention disclosed by Haartsen and provide a mobility indicia, as taught by Suzuki, thereby reducing power consumption and occupying network resources, as discussed by Suzuki (See Suzuki col.2 lines 25-29).

With respect to claim 3, Haartsen and Suzuki disclose all the limitations of claim

1. Suzuki further discloses accessing at least one metric that corresponds to radio frequency measurement report messages (See Suzuki col.6 lines 34-37, 49-55).

With respect to claim 4, Haartsen and Suzuki disclose all the limitations of claims

1 and 3. Haartsen further discloses accessing a metric that corresponds to a rate at which the wireless mobile station transmits radio frequency measurement report messages (See Haartsen col.8 lines 20-28, 45-56, and figure 6 & 7).

With respect to claim 5, Haartsen and Suzuki disclose all the limitations of claim

1. Haartsen further discloses an operating capability determination and the inactivity temporal window as a function, at least in part, of the operating capability of the wireless mobile station (See Haartsen figure 6, 7, col.8 lines 20-28, 45-56).

With respect to claim 7, the above combinations disclose all the limitations of claim 7.

With respect to claim 8, Haartsen and Suzuki disclose all the limitations of claim 1. Haartsen further discloses monitoring at a radio access network (RAN) (See col.3 line 10, col.5 lines 40-45, where Bluetooth communication system accesses other mobile units).

With respect to claim 9, the above combinations disclose all the limitations of claim 9.

With respect to claim 10, the above combinations disclose all the limitations of claim 10.

With respect to claim 11, the above combinations disclose all the limitations of claim 11.

With respect to claim 12, the above combinations disclose all the limitations of claim 12.

With respect to claim 13, the above combinations disclose all the limitations of claim 13.

With respect to claim 14, the above combinations disclose all the limitations of claim 14.

With respect to claim 15, the above combinations disclose all the limitations of claim 15.

With respect to claim 16, Haartsen and Suzuki disclose all the limitations of claim 1 and 15. Haartsen further discloses monitoring wireless communication system setup



times for a plurality of wireless communication units to provide a setup time indicia (See Haartsen figure 6 & 7, col.8 lines 20-28, 45-56 where the indicia measured is the idle time and where Haartsen discusses monitoring channel activity). Moreover, Haartsen discloses a peer-to-peer communication system where the mobile station monitors channels activities of different mobile units (See col.3 line 10, col.5 lines 40-45).

With respect to claim 17, the above combinations disclose all the limitations of claim 17.

With respect to claim 18, the above combinations disclose all the limitations of claim 17.

With respect to claim 19, the above combinations disclose all the limitations of claim 19.

With respect to claim 21, Haartsen and Suzuki disclose all the limitations of claim 20. Furthermore, Haartsen discloses the apparatus comprises an infrastructure element of a wireless communication system (See Haartsen col.5 lines 40-45).

With respect to claim 22, Haartsen and Suzuki disclose all the limitations of claims 20 and 21. Haartsen further discloses the infrastructure element comprises a radio access network (RAN) (See Haartsen col.5 lines 40-45).

With respect to claim 23, Haartsen and Suzuki disclose all the limitations of claim 20. Haartsen further discloses the apparatus comprises a wireless mobile station (See Haartsen col.5 lines 40-45).

With respect to claim 24, Haartsen and Suzuki disclose all the limitations of claim 20. Haartsen further discloses the apparatus comprises a combination of an

infrastructure element of a wireless communication system and a wireless mobile station (See Haartsen col.5 lines 40-45).

With respect to claim 25, Haartsen and Suzuki disclose all the limitations of claim 20. Haartsen further discloses an inherent third memory having communication resources setup delay information stored therein (See Haartsen figure 2-8, col.3 lines 14-22, 47-51, col.4 lines 11-43, 53-61, col.5 lines 1-10, col. 6 lines 17-26, 55-57, where third memory can be another segment of the first memory. Furthermore the third memories include EEPROM, ROM, or Flash memory which are inherent part of a control unit). Haartsen also discloses the processing platform further operably couples to the third memory and the instructions further modify the operation of the inactivity timer as a function, at least in part, of the setup delay information (See Haartsen figure 7, where the flow chart indicates the inherent presence of a control unit which runs the software. This control unit inherently needs to be coupled to memory in order to function).

With respect to claim 26, the above combinations disclose all the limitations of claim 26.

With respect to claim 29, the above combinations disclose all the limitations of claim 29.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US 6,804,542 B1) in view of Suzuki et al (US 5,301,225) and further in view of Park et al. (US 2003/0,114,159).

With respect to claim 2, Haartsen and Suzuki disclose all the limitations of claim 1. However they do not specifically disclose monitoring a hand-off rate. But Park discloses a method of monitoring a hand off rate (See Park section [0026]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inventions disclosed by Haartsen and Suzuki and provide hand-off rate, as taught by Park, thereby reducing power consumption and occupying network resources, as discussed by Park (See Park section [0032]).

With respect to claim 6, Haartsen and Suzuki disclose all the limitations of claim 1 and 2. However they do not specifically disclose monitoring a hand-off rate at a predetermined amount of time. But Park discloses a method of monitoring a hand off rate for a predetermined amount of time (See Park section [0030], and [0078]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inventions disclosed by Haartsen and Suzuki and provide hand-off rate, as taught by Park, thereby reducing power consumption and occupying network resources, as discussed by Park (See Park section [0032]).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lindoff (US 5,179,724) discloses a portable communication apparatus having three modes of operation.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sayed T. Zewari whose telephone number is 6851. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sayed T. Zewari

December 22, 2005

  
NICK CORSARO  
PRIMARY EXAMINER